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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/087,864

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Sjoblom Hans

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08/30/2006

Steven S. Payne  
8027 Iliff Drive  
Dunn Loring, VA 22027

EXAMINER

HENEGHAN, MATTHEW E

ART UNIT

PAPER NUMBER

2134

DATE MAILED: 08/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/087,864	Applicant(s) HANS, SJOBLOM	
	Examiner Matthew Heneghan	Art Unit 2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-14, 16-24 and 26-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-14 and 16-20 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-10, 21-24 and 26-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. In response to the previous action, Applicant has cancelled claims 5, 15, and 25 and amended claims 6, 7, 16, 17, 26, 27, and 32. Claims 1-4, 6-14, 16-24, and 26-32 have been examined.

### ***Drawings***

2. In view of Applicant's amendments to the specification, all previous objections to the drawings are withdrawn.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 6, 9, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,575,621 to Dreifus.

As per claim 1, Dreifus discloses a system wherein a smart card is disclosed that correlates a card with a user to whom it has been issued by way of a user identifier, and

allows transactions after it is determined that the card's identifiers are valid (see column 10, line 13-23). Other user authentication information may be required before the card can be used (see column 17, lines 32-51). Private keys (from public/private key pairs) are used to decrypt messages (see column 13, lines 25-28), and the key is stored and used solely on the card (see column 16, lines 3-6). No mechanism is disclosed for the user to view the private keys, and no reason is suggested for a user to do so. A direct card-to-card key transfer is disclosed (see column 16), but this does not require the user to be directly exposed to the key information. The authentication may be executed using the device's display (see column 17, lines 54-56), which inherently requires a prompting whenever the card is to be used.

As per claim 2, the card may be a credit card (see column 7, lines 10-12).

As per claim 3, the card may be used for identification (see column 18, lines 25-49).

As per claim 4, a computer program (i.e. software) may be downloaded that modifies the card's operations (see column 9, lines 37-57).

As per claim 6, keys may be obtained from the terminal (i.e. the user) (see column 9, lines 30-33).

As per claim 9, biometric characteristics such as hand structure retinal patterns, or fingerprints may be used for access (see column 17, lines 46-48).

As per claim 10, the all encryption/decryption functionality is performed by the card's CPU (see column 8, lines 56-57).

4. Claims 21, 24, and 30-32 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,673,316 to Auerbach et al.

As per claims 21, 31, and 32, Auerbach discloses a distribution system using a DFWM, which may be embodied as a smart card (see column 7, lines 43-45) that is issued to a user after a registration process (see column 6, line 63 to column 7, line 18). A private key may be assigned to the user for storage on the DFWM for authentication with trusted third parties (see column 7, lines 31-41) that is secret, inaccessible information (unknowable to the user). A purchase transaction takes place in which information is placed within a cryptographic envelope that is encrypted with the DFWM public key (see column 10, lines 6-34). Decryption takes place on the DFWM (see column 10, lines 57-64). The user is prompted for a password for authentication purposes, which triggers a private key lookup (see column 8, lines 15-25 and column 9, lines 6-8).

As per claim 24, the purchased document may be an MPEG audio/video stream (see column 4, lines 11-12).

Regarding claim 30, the user doesn't know the one private keys, and there are no other keys to know.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent No. 4,575,621 to Dreifus as applied to claim 1 above, and further in view of U.S.

Patent No. 4,944,007 to Austin.

Dreifus does not disclose the source of a card's original keys.

Austin discloses the embedding of the secret key by a credit card issuer (see column 3, lines 9-12), as this allows for a card to be able to prove its authenticity to the association (see column 3, lines 18-22).

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to further implement the smart card of Dreifus by having a card issuer embed the keys, as disclosed by Austin, as this allows for a card to be able to prove its authenticity to the association.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent No. 4,575,621 to Dreifus.

Dreifus discloses that a user identification code may be required for access (see column 17, lines 52-54), but does not specify that it be a number code.

Official notice is given that it is well-known in the art to implement identification codes or passwords as numbers, so that users may enter the codes using number pads.

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Dreifus by using number codes for the user identification codes, as is well-known in the art, so that users may enter the codes using number pads.

7. Claims 22, 23, 26, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,673,316 to Auerbach et al. as applied to claim 21 above, and further in view of U.S. Patent No. 4,575,621 to Dreifus.

Regarding claims 22, 23, and 29, Auerbach does not give details about the type of smart card used, or whether it can be used with biometrics.

Dreifus discloses a smart card that is an identification and/or credit card with biometric authentication, as described above, as further suggests that these cards are being used to effect a transaction (see column 1, lines 15-18) and that improper use of transactions systems can result in serious breaches of high-security systems (see column 2, lines 13-16).

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to implement the smart card of Auerbach as an identification or credit card with biometric authentication, as disclosed by Dreifus, in order to effect a transaction that is less likely to result in serious breaches of high-security systems.

Regarding claim 26, Auerbach also does not disclose the original source of a public/private key pair.

Driefus discloses the receiving of keys from a terminal (i.e. the user), as described above, and suggests that this allows for the periodic varying of encryption formats for enhanced security (see column 3, lines 3-6).

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to further implement the smart card of Auerbach by allowing the entering of keys from the terminal, as disclosed by Dreifus, as this allows for the periodic varying of encryption formats for enhanced security.

8. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,673,316 to Auerbach et al. as applied to claim 21 above, and further in view of U.S. Patent No. 4,944,007 to Austin.

Auerbach does not disclose the source of a card's original keys.

Austin discloses the embedding of the secret key by a credit card issuer (see column 3, lines 9-12), as this allows for a card to be able to prove its authenticity to the association (see column 3, lines 18-22).

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to further implement the smart card of Auerbach by having a card issuer embed the keys, as disclosed by Austin, as this allows for a card to be able to prove its authenticity to the association.

9. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,673,316 to Auerbach et al.



Auerbach discloses user authentication using passwords, as described above, but does not disclose that the password should be a number code.

Official notice is given that it is well-known in the art to implement identification codes or passwords as numbers, so that users may enter the codes using number pads.

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Auerbach by using number codes for passwords, as is well-known in the art, so that users may enter the codes using number pads.

***Allowable Subject Matter***

10. Claims 11-14 and 16-20 are allowed for the reasons stated in the previous office action, repeated below.

11. The following is an examiner's statement of reasons for allowance:

Regarding claim 11, no art could be found wherein received data that is doubly encrypted using public keys is decrypted on a smart card using two separate private keys. U.S. Patent No. 5,673,316 to Auerbach et al. discloses the decrypting of doubly encrypted data on a smart card, but one of the encryptions is done using a symmetric key, and no art could be found that would suggest the use of a public/private key pair in its place. In another close piece of art, U.S. Patent No. 6,961,858 to Fransdonk

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discloses a media player that receives a message that is encrypted with two public keys, but one of the decryptions is performed on the player using a player-specific key, rather than on the smartcard.

Claims 12-20 would be allowable based upon their dependence upon claim 11.

### ***Response to Arguments***

12. Applicant's arguments filed 16 June 2006 have been fully considered but they are not persuasive.

Regarding Dreifus, the varied code disclosed by Driefus may precede any of Dreifus' other operations, including the decryption of messages, as in several of the scenarios described in the preceding paragraph (see column 17, lines 32-51); therefore the data decryption is disclosed that is subsequent to the prompting operation.

Regarding Auerbach, the DFWM, which contains the body of the encrypted data, is initially distributed (see column 7, lines 43-45) prior to the buy request that triggers the password request and distribution of the key after the BRM request. In one scenario envisioned by Auerbach, which the user may make the purchase having seen some of the contents via preview of a "teaser" (see Auerbach, column 4, lines 9-18), which would require that the DFWM already be on the smart card before the initiation of a purchase.

### ***Conclusion***

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew E. Heneghan, whose telephone number is (571) 272-3834. The examiner can normally be reached on Monday-Friday from 8:30 AM - 4:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques, can be reached at (571) 272-6962.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Or faxed to:**

(571) 273-3800

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MEH



August 26, 2006

  
JACQUES LOUIS-JACQUES  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100